

10-1-2006

BS News

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Recommended Citation

(2006) "BS News," *Building Services News*: Vol. 45: Iss. 9, Article 1.

Available at: <https://arrow.tudublin.ie/bsn/vol45/iss9/1>

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bs news

building services news

Power of One
Protecting the
Environment

Sustainability
at Plan Expo

**Grundfos has the
piece of the puzzle
you need...**



When replacing a circulator pump, there is more to think about than simple mechanical dimensions. Like a jigsaw puzzle, where the motif as well as the size of the piece must match, fitting a new circulator requires many elements to mesh.

Dealing with us puts you in touch with one of the world's largest manufacturers of circulator pumps. Several of our pumps feature A-ratings on the energy labelling scale. We believe that our extensive knowhow, experience, complete product range, and attractive price points allow us to provide you with just the piece of the puzzle you need.



The right shape, the right benefits

Grundfos glandless pumps offer numerous benefits, and all are characterised by reliability and energy efficient operation.

- No risk of leakage
- Quiet operation
- Energy labelled
- Maintenance free



Reading the table

The table to the right provides you with a brief overview of the different types of Grundfos glandless pumps. It allows you to make a general recommendation based on some simple criteria. Please refer to the technical information further on in this booklet for more precise sizing and selection information.

ISSN 0791-0878

Published by:

Pressline Ltd,
Carraig Court,
George's Avenue,
Blackrock, Co Dublin.
Tel: 01 - 288 5001/2/3 Fax: 01 - 288 6966
ISDN: 01 - 211 2338/9
email: bsnews@pressline.ie
web: www.buildingservicesnews.com
www.bsnewsbuyerguide.com
www.pressline.ie

Editor: Pat Lehane

Advertisement Director: Joe Warren

General Manager: Louise Byrne

Origination and Design:

Pressline Ltd. Tel: 01 - 288 5001

Subscription: One Year — €70

Printed by: Ebrook.

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advertisements prepared by the publishers,
Pressline Ltd.

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Published by ARROW@TU Dublin, 2006

opinion

History Does Repeat Itself But Lets Break the Pattern!

Browsing through some back-issues of *bs news* from 1990 recently I was struck by the number of articles calling for regulatory control of the domestic installation sector. In October of that year these efforts culminated in the formation of the Registered Heating Contractors Association (RHCA). Despite the best efforts of those involved the initiative faltered and the Association eventually folded.

Over the last couple of years the Register of Environmental Gas Installers of Ireland (REGII) was formed to once again tackle the matter of registration. Considerable progress was made but now the situation is at a critical stage. The forthcoming Energy Bill does contain provision for a register of sorts but, unless the main body of installers throughout the country genuinely subscribes to its objectives, it simply will not happen.

Stories of hardship within the installation sector are rampant at the moment, and this at a time when we have, apparently, never had it so good. Despite the boom of the last 10 years, it would appear that it was all about turnover, not bottom line profit margins.

We are now facing into yet another cyclical opportunity, this time driven by the need for energy efficiency and sustainable building services installations. Solar panels, wood pellet stoves, geothermal technology and heat pumps are today's buzzwords.

But what does the average installer really know about this new technology? What regulations are there governing installation criteria and standards? The urgency for a register of competent and authorised installers has never been greater. History can, and does, repeat itself but let's break the pattern on this one.

trade news + product information

mtd multiport ventilation system

MTD-Solutions has introduced the MVS-9G2 multiport ventilation system which does not have heat recovery but is designed to extract stale air from bathrooms, and a cooker hood, if the MTD-OW-600 motorless cooker hood is being used. These systems are ideal for apartments.

A standard ventilation system — with two hours on high speed, 14 hours on medium speed and eight hours on low speed — consumes on average 331.42kW per year. However, the MVS-9G2 system consumes only 165.71kW per year, representing an average saving of 50%. The ABS casing is 100% recyclable, impact-resistant and is supplied to 'VO' flame extinguishing quality standard.

In the Netherlands stringent requirements are stipulated in respect of the energy efficiency of new build homes, in the form of an Energy Performance Coefficient (EPC). The maximum value for the EPC has been defined in the Buildings Decree as being 1.0 since 2000. The MVS-9G2 is designed to meet these requirements, and makes a significant contribution to the set EPC of 1.0, thanks to its energy-efficient motor. The contribution of this new motor to the EPC is an average of 15%.

Contact: Ciaron King, MTD Solutions. Tel: 045 900590; email: info@mtd-solutions.com



dornan engineering sponsor kids rugby

Munster's Heineken Cup Heroes Ronan O'Gara and Donnacha O'Callaghan pictured at the announcement of Dornan Engineering's sponsorship of Cork Constitution RFC under age rugby section. The agreement is set to run until 2009. The trio are pictured with Constitution's Fred Casey and members of the U-12 Squad.

one control for all pressure applications

The new Series DH Digihelic differential pressure controller from Manotherm is a 3-in-1 instrument incorporating a digital display gauge, control relay switches and a transmitter with current output.

It allows for the selection of pressure, velocity and volumetric flow operations in commonly-used engineering units and is ideal for applications such as SCFM flow in ducts, filter status, clean room pressure, damper control, fan control, dust collection bag filters and pharmaceutical or bio-medical glove box pressures.

Programming is simple using the menu key to access five simplified menus which provide access to a vast range of options including security level; selection of pressure; velocity or flow operation; selection of engineering units; K-factor for use with flow sensors; set point control; and field calibration.

Contact: Bob Gilbert, Noel Walsh or Robert Gilbert, Manotherm.
Tel: 01 - 452 2355; email: info@manotherm.ie



Delivering first class technology

ECOi R410A 3 Way Multi

8HP to 48HP

SANYO are justifiably proud of its next generation of simultaneous heating and cooling VRF systems, the ECOi 3 Way Multi. Specifically designed for the UK, the units combine the latest DC Inverter technology and R410A refrigerant to provide dramatically improved energy efficiency, wider operating ranges and longer pipe runs than ever before.

- Simultaneous heating and cooling
- 22.4kW to 135kW nominal cooling capacity
- Industry low outdoor sound levels: 55dB(A)
- COPs start at 4.09
- Provides cooling down to -10°C ambient
- 150m pipe separations
- Connects up to 40 indoor units
- Industry's smallest changeover boxes
- 10 indoor styles, 11 indoor capacities
- New TouchScreen controller

Simple to apply, install and maintain, the ECOi 3 Way Multi range also qualifies for the Enhanced Capital Allowance scheme.

SANYO - a good decision all round.



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Published by www.sanyoaircondition.com



All round air conditioning by **SANYO**

trade news + product information

sontay humidity sensors

Sontay has introduced a new range of RH humidity sensors which incorporate resilient, self-calibrating digital sensing circuitry for accurate and reliable performance up to 100% relative humidity.

They provide reduced hysteresis and repeatability of the control signal, features further enhanced by the digital electronics being scaleable, allowing the precise operating range to be selected. They also feature adjustable sensitivity.

Provided with a choice of either a $\pm 2\%$ or $\pm 3\%$ degree accuracy, Sontay's RH sensors include options for a local display of up to three sensed variables and the capability for direct thermistor temperature measurement to widen application versatility.

Contact: Conor Walsh, Safegard Systems. Tel: 01 - 276 1600;
email: info@safegard.ie



ms excel training

Refrigeration Skillnet has partnered with Bua Training to offer Microsoft Excel training in Dublin. It will be organising various training dates in November and December 2006 according to demand. Training will be provided at three levels — introductory, intermediate and advanced (levels 1, 2 & 3).

The course fee is €100 for network members and includes course notes, lunch and refreshments. It also includes 12 months post-course support, so the trainer will help out on any problems related to the training.

Contact: Enda Hogan, Refrigeration Skillnet Network Manager. Tel: 058 - 44211;
email: refskill@eircom.net

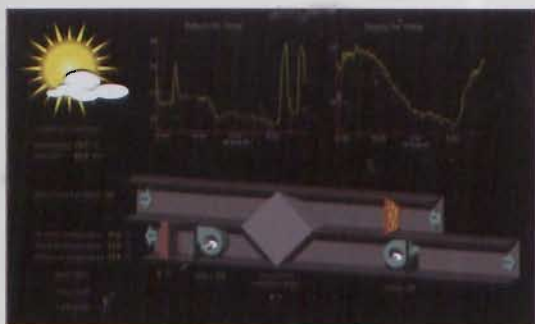
carrier aquasmart plus control

The next generation Carrier Aquasmart air conditioning control system, Aquasmart Plus, is now available from Core Air Conditioning. It was developed to ensure that HVAC systems in small to medium sized installations operate as fully-integrated designs to maximise energy efficiency.

Aquasmart Plus utilises the ASHRAE-approved open protocol BACNet system and can interface with most building equipment such as boilers, security systems, lighting and lifts, third-party air conditioning equipment and building management systems.

It can display the system it is controlling on a personal computer, hand-held PDA or mobile phone. The control can monitor energy usage, and energy performance, utilising a "thermal imaging display" for quick reference of areas and their relative temperatures. Reports and trending information can also be generated.

Contact: Austin McDermot, Core Air Conditioning.
Tel: 01 - 409 8912; email: info@coreac.com



Planning an environmental upgrade for your building?

et al. BS News



Honeywell has the future all mapped out

- Honeywell leads the world in building control technology, improving the working environment, conserving energy and raising fire and security standards.

In fact, Honeywell building controls can match the needs of any building precisely, from individual controls to a fully integrated management control and protection system.

The market for Honeywell building controls covers every type of location and every kind of customer. And, whatever your requirement, our distributors in Ireland are on hand to provide advice and support. That's how we build strong working partnerships with all customers.

Honeywell's reputation for quality and reliability is second to none. And this, coupled with our market leading innovations, ensures that buildings run smoothly and can easily be upgraded or modified with products that will serve you effectively today and well into the next millennium.

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Honeywell

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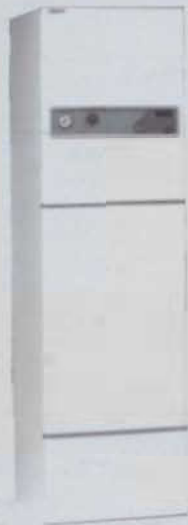
Bracknell, Berks RG12 1EB

Telephone: 0044 1344 656000

Fax: 0044 1344 656240

trade news + product information

one control for all pressure applications — controlled domestic ventilation with heat recovery



When ventilation based on opening windows and controlled domestic ventilation without heat recovery is used, the energy from the inside air is not utilised. This amounts to a considerable energy loss as the ventilation heat requirement can be as much as 50% of the total heat requirement.

However, controlled domestic ventilation *with* heat recovery — as provided by the Nibe Fighter range — re-uses the energy from the exhaust air. Moreover, it also avails of the additional heat generated internally by lighting, people and domestic appliances.

In addition to energy recovery and subsequent energy savings, applications using models from the Nibe Fighter range also result in a reduction in CO2 emissions.

Contact: Paul O'Donnell, Unipipe. Tel: 01 - 286 4888; email: info@unipipe.ie

btu president's day

The BTU President's Outing was held in Newlands Golf Club early last month with an excellent turnout enjoying a great day's golf and the wonderful hospitality of sponsors C&F Quadrant. Results were as follows:—

Overall Winner — Steve Jones;

Class 1 — 1st: Ger Hutchinson, 2nd: Sean Smith,
3rd: Brendan Keaveney;

Class 2 — 1st: Gerry Tobin (back nine), 2nd: Bernie Costelloe,
3rd: Derek Whelan;

Class 3 — 1st: Garvin Evans (back nine), 2nd: Liam Stenson,
3rd: Damien Mooney.

Front Nine — Jim Smith;

Back Nine — Mick Matthews;

Visitor — David Lynch.



Michael Murphy, BTU President, presenting Steve Jones with his trophy

swegon's parasol chilled beams

Swegon AB has just introduced Parasol, a compact chilled beam comfort module designed for commercial and industrial application in the Irish marketplace. Key benefits are claimed to be low energy, running and maintenance costs, coupled with the benefits of chilled beam technology.



"Parasol is an important development because its compact design makes it compatible with competing fan coil unit sizes while offering the advantages of chilled beam technology" said Domnick Ward, Director, Crystal Air Ltd, who represent Swegon in the Leinster region.

Chilled beam technology is particularly suitable where high comfort levels are required with minimal noise or air movement. The new comfort module comes in two standard sizes and is suitable for both new-build and refurbishment applications. It is designed for use in most T-Grid ceiling systems and clip-in type ceilings in terms of length and width.

"Parasol is a complete plug-and-play unit " said Domnick Ward. "All modules offer flexibility in air flow configuration, thanks to a four-way air supply system, while control and temperature-sensing is incorporated within each unit.

Contact: Domnick Ward, Crystal Air. Tel: 045 - 893228; email: domnick@crystalair.ie

using nature to devise ...

et al.: BS News

design-led

technology-driven

heating concept solutions



runtal



jaga



vogel



zehnder radiant
ceiling panels

Versatile Agencies has taken the traditional concept of heating and given it form. This is achieved by applying its own extensive knowledge and experience to the product portfolios of cutting-edge, innovative, brand leaders like Jaga, Runtal Zehnder and Vogel.

Heating solutions are custom-designed to facilitate each application. Where visible, the heat emitters contribute to the aesthetics of the setting; however, they can also be unobtrusive to the point of being invisible.



Beechmount Industrial
Estate, Navan, Co Meath

Tel: 046 - 902 9444
Web: www.versatile.ie

trade news + product information

mk electric in hot water

Novar Ireland has extended its range of MK electrical products to incorporate a new collection of heating and hot water controls. Available in a number of models comprising thermostats, timers and chronotherms (programmable thermostats), the controls feature easy-to-use interfaces; clean, modern designs and are claimed to be quick and easy to install.

Features include wiring knock-outs, trunking guides, large wiring terminals with captive washers and – for the electronic time-switches/programmers – the ability to retrofit onto existing backplates. Once installed, they offer the homeowner full functionality, allowing variable settings for time, temperature and a combination of the two.

Contact: Eamon Conway, Novar Ireland. Tel: 01 - 429 6500;
email: ireland.sales@novar.com



plumbing & ufh needs at uponor.ie

Uponor Ireland, the underfloor heating and flexible plumbing expert, has created a new website (www.uponorhousingsolutions.ie) to support its new offices in Swords, Co Dublin. Uponor is a Finnish-owned company with a keen eye on the global market, with Ireland forming an integral part of the Western Europe sector.



The new website will enable customers download Uponor literature via the online registration process, or alternatively larger files can be sent in the post on request via the online form. Once a product(s) has been selected, a quotation for UFH can be supplied via an online enquiry form, answered by a fully-trained technical team who are available at every stage of a project involving Uponor products.

The website also gives details of local stockists of Uponor products, including location maps and directions. In addition, the "press room" will give customers up-to-date details of news and new products — such as the newly-released EB25U electric boiler designed specifically for the UFH market — and keep visitors updated on the latest developments at Uponor Housing Solutions.

There are also plans for a state-of-the-art training centre where installers, merchants and specifiers can attend, and participate in, a programme of planned seminars and workshops on UFH and flexible plumbing.

Contact: www.uponorhousingsolutions.ie

redring hotbox electric boiler

Redring has introduced a compact electric boiler called the Redring Hotbox which drives a sealed wet system in any domestic or light commercial site and can deliver 60°C+ up to eight radiators with an outside temperature of 0°C.

Hotbox is designed specifically for use in small, pressurised, sealed system installations with a simple plug-and-play installation, making it a viable alternative to gas for smaller applications or where silent operation is important.

Major benefits include no heat loss through the flue (no need for one) so all energy used is converted into heat; no obligation for annual maintenance checks; almost silent operation when used on sealed systems; can be connected to any type or make of wet radiator; no noxious gases are emitted; easily exchangeable halogen elements keep maintenance costs low.

Contact: www.applied-energy.com



Unipe Press Fitting System



Unipe Controls



Nibe: New Air-to-Water Heat Pumps



Unipe Floor Heating



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Boghall Road, Bray, County Wicklow
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E: info@unipe.ie
W: www.unipe.ie

Pressed For Time? Joints in 3 Seconds!



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- Unipe (by Uponor) multi-layer pipe offers a proven alternative to steel, copper and plastics for mechanical services.
- Available in straight lengths (all sizes 12 to 110mm) and coils (to 32mm).
- Corrosion proof, faster, cleaner. No welding screwing or painting. Longer lasting and lower installed costs
- One pipe...no waste...offcuts from one application can be used elsewhere on the job
- From Sweden NIBE offer ground-source, Air-to-Water and exhaust air heat pumps. NIBE are Europe's largest producer of heat pumps.

trade news + product information

honeywell hvac drive for pumps & fans



The new Honeywell HVAC drive for pumps and fans is easy to install and can be either surface-mounted or in a panel. Set up takes a reported 30 seconds using its Start-Up Wizard with Modbus built-in and plug-in cards available for all common open and proprietary buses.

Choosing the right model to suit the application is simple – just select the motor power. All drives in the range are preconfigured, IP54-rated and have a Class C RFI filter, so they can be used in every situation.

Contact: Honeywell Building Controls. Tel: 0044 656655; email: HVACProductsUK@honeywell.com; <http://europe.hbc.honeywell.com>.

mitsubishi electric pfd close control system

Mitsubishi Electric's close control system (PFD Series) is designed specifically for computer rooms, laboratories and similar applications where strict control of humidity and temperature is paramount.

PFD Series includes two indoor units with high sensible cooling capacity for computer and technical equipment rooms. The big heat exchanger makes it possible to reach the SHF factor 0.93 of the sensible heat load. The low latent capacity makes the additional air humidification unnecessary.

The switch tolerance is $\pm 1K$ while the airflow of the units is in double-ground direction. Both of them need less space due to the compact construction. The indoor unit PFD-P500VM-E provides 100% redundancy.

The outdoor unit is equipped with a full inverter compressor with the advantage of very low starting current of just 8A. Long piping lengths of 120 m between indoor and outdoor units, as well as the height difference of 50m allow wide scope for planning purposes.

Contact: Paul Sexton, Mitsubishi Electric. Tel: 01 - 419 8800; email: paul.sexton@meir.mer.com



marshall-tufflex cable management

Marshall-Tufflex has introduced a new cable management system called Odyssey which is said to be the first 3-compartment, PVC-U system on the market with a completely curved outer profile.

The new clip-on action of the lid is unique, snapping on to the rear of the base and thereby allowing the system to follow the irregularities of the fixing surfaces in order to create the smooth lines that are the hallmark of the Odyssey trunking system.

Fixed horizontal bends have been designed for maximum aesthetic achievement but there is also the option of adjustable bends to accommodate the problems thrown up by building intolerances.

All fittings have bend radius cable control for Cat 6 compliance; steel dividers are available to protect data from power (complying with Information Technology Standard BS EN 50174-2); and there is also a copper spray screening for total protection against EMI.

Contact: Dan Fisher, Core Electrical. Tel: 01 - 453 7033; email: dfisher@coreelectrical.ie

**Most boiler
manufacturers
talk about
CO₂ emissions.**

**How many
mention NO_x?**

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For more information, please call our Literature Request Line on 01 - 459 0870.

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POTTERTON

The Chartered Institution of Building Services Engineers (Republic of Ireland) Cork Region

Winter Series Professional Development Lectures

Lecture: Heritage Event, Crawford Observatory, UCC
Speaker: Dr Paul Callanan, Department of Physics, UCC
Date: Thursday, 2nd November 2006
Venue: Boole Library Podium Lecture Theatre No 2, UCC
Time: 6.30PM - 9PM (light refreshments provided)

Lecture: Renewable Energy in Ireland —
Token Gesture or Serious Contender?
Speaker: Dr. Brian O'Gallachoir,
Sustainable Energy Research Group, UCC
Date: Thursday, 9th November 2006
Venue: Lifetime Lab, Old Cork Waterworks, Lee Road, Cork
Time: 6.30PM - 9PM (light refreshments provided)



The Crawford Observatory, UCC, Cork

Lecture: CO₂ Cooling for Server Rooms
Speaker: Guy Hutchins, TROX Advanced IT Cooling Systems
Date: Thursday, 16th November 2006
Venue: Lifetime Lab, Old Cork Waterworks, Lee Road, Cork
Time: 7PM - 9PM (light refreshments provided)

Lecture: Micro CHP for Offices and Small Developments
Date: Thursday 25th January 2007.
Venue: Lifetime Lab, Old Cork Waterworks, Lee Road, Cork
Time: 6.30PM - 9PM (light refreshments provided)

Lecture: CO₂ Refrigeration Systems for Retail Sector
Speaker: Andy Campbell, Tesco Engineering Manager, Refrigeration
Date: Thursday, 8th February 2007
Venue: Lifetime Lab, Old Cork Waterworks, Lee Road, Cork
Time: 6.30PM - 9PM (light refreshments provided)

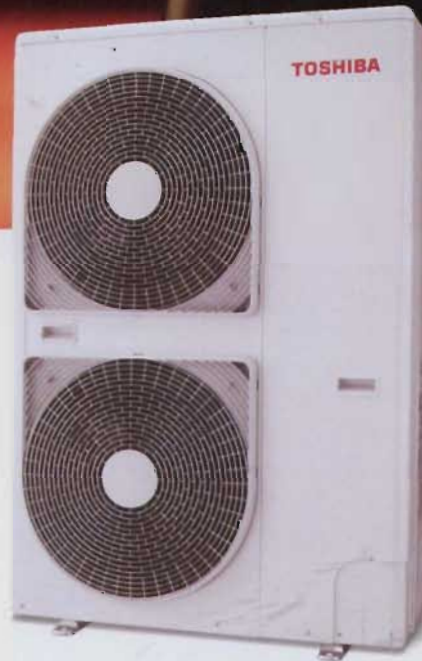
RSVP to Anna Maria Murphy, Arup.
Tel: 021 - 422 3274 or
email anna-maria.murphy@arup.com
as numbers need to be confirmed.

A CPD Certificate will be issued to each attendee.



Lifetime Lab, Old Cork
Waterworks, Lee Road, Cork

TOSHIBA



New VRF Series: R410A MiNi-SMMS

Designed for professionals by professionals. The MiNi-SMMS delivers the ideal comfort level in a compact, quiet and lightweight unit ensuring ease of installation and operation. Capable of operating up to 9 indoor units, from a choice of 13 designs including the new 600 x 600 mm ceiling cassette.

PERFORMANCE

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- Extended refrigerant piping capability

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AND HIGHLY
EFFICIENT**

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The Mitsubishi Electric Programmable Logic Controller*¹ (PLC) connects to our G50 control systems to provide maximum control for hotels everywhere. By simply programming the indoor air conditioning units to work in conjunction with existing key card systems, the PLC achieves the highest level of control.

When the hotel room is:

- > **Occupied with key card inserted.** The air conditioning is initially set to 'Auto' mode and 21°C*². From this point onwards the guests then have full control.
- > **Occupied with the key card inserted and a window open.** When using the optional window sensor, the air conditioning is automatically switched off to save maximum energy.
- > **Unoccupied with no key card inserted.** The air conditioning is automatically set to 'Night Set Back' mode which maintains the room temperature between 16°C*² and 26°C*².

Using the PLC with our advanced control systems (G50 or Baby G50), enables all guest rooms to be easily monitored and/or controlled from a central point in the hotel, ensuring utmost comfort and maximum efficiency throughout.

It also:

- > **Ensures maximum comfort and efficiency** by preventing guest rooms being too hot or too cold prior to occupation.
- **Saves energy** by avoiding guests inadvertently setting the wrong mode (ie. Heating/Cooling instead of Auto).

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or visit www.mitsubishielectric.ie



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Fax: 01-4198890
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www.mitsubishielectric.ie

*1 No dedicated computer is required

*2 Setpoint and temperatures are configurable





Gas Engine Heat Pump VRF — The Facts



Sanyo Airconditioners is one of the world's leading manufacturers and suppliers of air-conditioning systems, and its portfolio includes electric and gas heat-pump (GHP) VRF systems, residential and commercial split-systems, and chillers.

Part of the strength of Sanyo's range lies in the fact that, for larger commercial applications, it offers both electric and gas VRF systems, depending on the client's requirements, site-conditions, services etc. Each project is judged on its own merits, and the system-type proposed by Sanyo Airconditioners and its nationwide network of dealers is always the best suited to that particular application. In other words, Sanyo offers what most other manufacturers cannot ... a choice.

In an article published in the previous issue of *bs news*, a critique was made against GHP systems, some points of which are not relevant to Sanyo's GHP units. Sanyo believes these inaccurate statements need to be corrected and clarified, writes Vincent Mahony, Sanyo Airconditioners.

EER and COP figures for R410a GHP units vary respectively from

1.35 to 1.60, and 1.33 to 1.50, for the available outdoor units capacities. Although these figures seem lower than those expected from an electric VRF system, they can easily be misinterpreted, and are only half the picture. Why? EER and COP are of prime concern in running cost evaluations. When primary energy costs are brought into the equation, the average running-cost of a GHP system against electric VRF is reduced by as much as 40%. This offers substantial savings to the end-user.

There is also a marked reduction in CO₂ emissions from the GHP unit because natural gas is a cleaner fuel than electricity. SEI figures for emissions from electricity are 624g CO₂/kWh, while natural gas is 197.8g CO₂/kWh. These figures relate to power input. Even with the lower EER and COP ratings, this equates to CO₂ emission-reduction from a GHP unit against an equivalent electric VRF unit of between 15/25%. This may well be a factor when commercial buildings are awarded a Building Energy Rating (BER). Overall, GHP units are cheaper to run, and are kinder to the environment. Fact.

With regard to the footprint of GHP systems, the outdoor units are larger than electric VRF, but only marginally so. Sanyo Airconditioners' most popular

model is the nominal 56kW, which has a footprint 3.2% larger than the equivalent electric VRF unit. However, marginal increase in footprint may be offset against the potential space-saving made by utilising smaller power distribution-boards.

Capital costs of the GHP units are higher than the electric equivalent, but certainly not double. Typically, a GHP system would carry a cost-differential of 15/25%, depending on the application. However, with lower running costs, this equates to a very acceptable payback period.

This is also assuming there is no need to increase the power supply to the building to cope with the additional electrical demand of an electric system. The power supply must be increased, an immediate payback is possible with a GHP system. This is a cost not associated with GHP as all units in the range require only a single-phase power supply. Of course the unit must be supplied with either a natural or LPG gas supply. The difference in capital cost between a GHP system and an electric system lies only in the outdoor unit. The indoor units, pipework, cable-tray, controls, control-network etc are exactly the same for both options.

Another major advantage of the GHP system is heat-output.

Because Sanyo utilises the waste-heat from the gas-engine and transfers it into the refrigerant circuit via a heat exchanger, Sanyo can guarantee 100% heat-output from the indoor-units down to an ambient of -20°C . Also, because the outdoor coil temperature never drops below 5°C , no defrost-cycle is required. This ensures room temperature is always maintained, even in the coldest weather.

Sanyo can also utilise this waste-heat from the engine to heat the domestic water, adding greater efficiency onto the heat-reclaim value of the units, and thus providing the end-user with free hot-water.

If an end-user is concerned about refrigerant pipework being distributed around the building, Sanyo can utilise one of its refrigerant-to-water heat exchangers to feed into a chilled-water circuit serving fan-coil units.

Alternatively, a mix of fan-coil units and DX units may be served by the GHP outdoor unit.

GHP offers another solution to the client. If natural gas is unavailable, LPG may be utilised. The units offer both lower running costs and CO₂ emissions over electric VRF solutions, and can produce 100% heating down to -20°C , with no defrost-cycle requirement.

In Ireland there are almost 100 GHP units

installed nationwide, with a broad range of applications, including both domestic and commercial projects. Installations include private residencies, office developments and hotels, most notably the 5-star Fota Island Sheraton in Cork.

Sanyo acknowledges that GHP may not always be the solution for a particular application. It's about having the choice, which not all manufacturers can claim to offer. Hence the appearance of inaccurate articles relating to GHP where the technology is dismissed without being properly understood in the first place.

If electric VRF is required, Sanyo can offer both 2-pipe and 3-pipe options, in the range of 22.4-135kW nominal cooling, 25-150kW nominal heating. COP and EER figures for Sanyo electric VRF are also extremely impressive with average figures at COP 3.9 and EER 3.44.

As the foregoing clearly illustrates, it is vital that all the key factors are taken into account when comparing GHP systems and electric VRF systems. Both have their place and it is essential that the requirements of each particular application are fully assessed before choosing one over the other. Sanyo's strength is that it can help with this evaluation process and provide both GHP and electric VRF solutions. Fact.

Architects, Specifiers, Engineers, Surveyors, Builders, Plumbers...

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face to face

JAMES PIKE



James Pike, RIAI President for 2006/2007, is widely recognised and respected as an industry father-figure yet, paradoxically, he is also renowned as a visionary and keen exponent of innovative design and new technologies. Throughout his career he has always been progressive and forward-thinking, a trait which has in fact sharpened over the years rather than diminished. The industry at large is fortunate in that he has always shared these strengths by way of active involvement in the activities of representative professional bodies and related industry bodies.

James is one of the principal directors of O'Mahony Pike (OMP), an off-shoot of Delaney MacVeigh & Pike which was established as far back as 1964. OMP is best known for its work on innovative and high-density residential schemes and is currently the leading Irish practice in this area of design. Since the founding of the original partnership over 40,000 dwellings have been completed with 15,000 currently at different stages of development.

OMP is also involved in master-planning three new rail-based communities on the perimeter of Dublin with a potential for over 150,000 population. Further substantial urban development schemes at transport-based locations in Dublin and Cork are also being designed by the practice.

Extensive experience has also been gained in Town Development Plans and Masterplans with an increasing emphasis on Urban Design, integrating new buildings into the existing urban framework, or creating new urban environments on larger sites.

Wearing his RIAI hat, the Urban Forum is a project very close to James' heart at present. It involves all the related professionals involved in planning and construction liaising with one another to ensure genuinely sustainable design and development. To date M&E consultants have not been involved in this process but this is now about to change thanks to James' invite to CIBSE to participate in the Urban Forum.

Traditionally, there has been a bit of stand-off between architects and consultants, and maybe even a reluctance on the part of both to engage with one another. This has got to change. "It is terribly

face to face

JAMES PIKE

"It is terribly important that architects and M&E engineers liaise and engage with one another at the earliest possible stage of a project."

"The pace of change is phenomenal and we should be working together, not just to apply the advances being made, but rather to influence the very nature of these advances."



James Pike

important that architects and M&E engineers liaise and engage with one another at the earliest possible stage of a project", says James. "Building services are a critical part of the equation and they have to be very carefully considered from the outset if we are to realise sustainable design.

"Indeed, what we really need is take it back a stage further. Given the sophistication of today's construction industry — from advanced building products and techniques through to innovative building services systems and controls — architects and consultants need to collaborate at the research stage. The pace of change is phenomenal and we should be working together, not just to apply the advances being made, but rather to influence the very nature of these advances.

"For instance, a better-built project may have improved air-tightness but what are the implications in respect of ventilation? A sophisticated heating system may reduce the gas running costs but does the control technology employed lead to increased electricity consumption? These considerations appear obvious when we're confronted with them but we must work together at the research stage to prevent them arising in the first place".

In our Face to Face feature in the May 2006 issue of *bs news* Brian Geraghty, Chairman, CIBSE, alluded to the need for closer links between the various representative bodies within construction. He talked in particular of the need for consulting engineers to engage with architects. This month James Pike does likewise. There is only one way to go from here guys ...

Focus on Energy

Active Solar Systems (Bulletin No. 3)



Gerard Bernage
Senior Engineer,
McCarrick
Woods

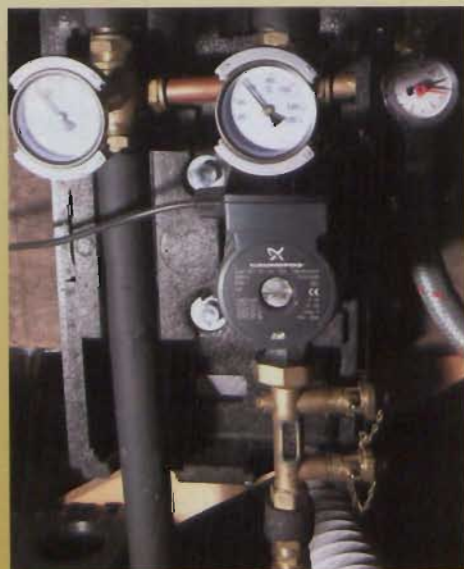
In my last two bulletins on active solar systems I looked at the design of the following:

- ☐ Solar domestic hot water (DHW) cylinders;
- ☐ Solar flat plate collectors.

The next two will complete the series by looking at the Mechanical works needed to complete the installation of this equipment into my home in Dublin.

PANEL SIZING

I found there were differences in the recommendations coming from different suppliers regarding the area of collector that should be used. This seemed to stem from a difference in outlook between Danish and German manufacturers.



The Danish suppliers (BATEC solvarme) advised me to use the following method of sizing:

- ☐ Daily DHW demand for a 3-bedroom house at 55l/bedroom = 165l;
- ☐ Panel area based on 1m² for each 50-65l of heated water;
- ☐ Panel size = (165/50) = 3.3 m²;
- ☐ Another rule of thumb used is 1m² panel / person).

On the other hand the German supplier recommended 1.5 m² for each 50-65l of heated water and this would have resulted in a panel area of 5m² for my home.

I followed the Danish advice as BATEC manufacture a single 3.2m² panel and this was a very cost-effective and simple solution for my project. BATEC informed me also that the 3.2m² panel, combined with the 210l DHW cylinder, was very common in smaller homes and apartments in their country.

PUMP SIZING

A solar pump is necessary to transfer heat from the collector to the DHW cylinder. The rule of thumb used to size the pump is 0.5-0.8l / (min m²) of panel.

My installer came with a pre-assembled unit known in the trade as a Solar Station. This was a ready-made frame containing the following piped-up components:

- ☐ Grundfos 3 speed circulating pump;
- ☐ Flow indicators;
- ☐ Pressure relief safety valve;
- ☐ 18l expansion vessel;
- ☐ Thermometers, pressure gauges, fill & drain valves;
- ☐ A check valve (to prevent reverse flow at nighttime);
- ☐ An insulation box to enclose and protect all the components.

CONTROL

Solar pumps are controlled by means of a differential temperature controller. The switch starts the pump when the temperature inside the top of the solar panel exceeds that at the bottom end of the DHW cylinder. The pump therefore only runs when there is useful heat to be gained.

ANNUAL PERFORMANCE

The generally-accepted breakdown for the amounts of annual DHW produced from domestic system is as follows:

- ☐ May/June/July/Aug — 80-90% of DHW demand;
- ☐ Spring/Autumn — 50-60% of DHW demand;
- ☐ Winter — 5-15% of DHW demand.

The average over the year is usually taken as 50%-60% of total. More than this can be achieved but installations sized to achieve the 50%-60% annual figure are generally seen as the most cost-effective. Excessive number of panels can cause problems of overheating in the summer months.

All items requiring hot water i.e. the washing machine, shower etc. were fed from the central DHW cylinder to ensure that maximum gains were achieved.



Vacant Property Protection for Less Than €40 a Week

Protecting buildings which are vacant for any measurable length of time is a major problem for property owners. However, putting adequate security measures in place can be difficult and expensive. Options include 24-hour security (effective, but very expensive); patrols (reactive rather than preventative); alarms (reactive); CCTV (expensive and reactive); boarding (expensive and advertises the fact that the property is empty). Then there is the whole issue of insurance.

It is against this backdrop that Camelot Property Management Ltd has entered the Irish Market. Originally established in Holland over 12 years ago, Camelot also has offices in Belgium and the UK, and is now firmly established as Europe's largest "Protection by Occupation" organisation. It currently manages over 1500 buildings using more than 5000 Guardians (Key Workers) protecting every type of property, from industrial and commercial through to some residential property.

"It's a very simple concept but one which has a very sophisticated process behind it", says Aidan Devlin, Director, Camelot Property Management Ltd. "We place Key Workers to temporarily occupy each property for the time it is going to be vacant. The fact that the property is occupied over evenings and weekends means that it is less likely to be vandalised. It also means that problems such as burst pipes, attempted break-ins, etc are reported immediately.

The process from initial inspection to full management is very straightforward and is determined by Camelot's ISO 9002 and BSI Standards (Vetting and Keyholding). "It's very empirical", says Devlin. "We first conduct a health and safety report on the property to identify any issues which need to be remedied. When these are dealt with we then determine the optimum number of guardians required to



De Beauvoir, London, a typical example of a property in the care of Camelot

adequately protect the property.

"Operation of the concept is quite straightforward. The building owner pays the costs (should there be any) to make the property habitable, together with the utility costs (electricity, heating, etc) and a very modest weekly management fee. This can be as little as €40 per week for a house, and up to €500 per week for a large industrial site.

"Once the building is habitable, 'Guardian' living quarters and communal areas are assigned and labelled, with out of bounds areas sealed off and labelled. The property is photographed digitally to record its condition and this becomes the benchmark for when it is being handed back.

"When the building is taken into management the owner signs an Authorisation Agreement (devised by solicitors Mason Hayes & Curran) with Camelot which confers no rights on Camelot but merely authorises us to place 'Guardians' in temporary occupation. 'Guardians' sign a Temporary Occupation License (again devised by Mason Hayes & Curran) which confers absolutely no tenancy rights, and equally outlines their obligations and responsibilities in clear and

unambiguous manner. Once under management the building is inspected each month by a Camelot Building Inspection Manager with the ensuing report being forwarded to the owner."

The recruitment, vetting and selection of 'Guardians' is governed by BSI 7858 (vetting) with only 30 out of every 100 applicants being selected. 'Guardians' responsibilities are to keep the building in good condition and report any incidents – be they minor or serious – to Camelot Property Management Ltd on our 24-hour emergency line. In placing 'Guardians' Camelot tends to mix day workers with shift workers to ensure there is always somebody on the premises.

In summation, what the building owner gets is 24-hour security for less than the cost of a patrol (€40 - €500 per week depending on the size of the property) while the 'Guardian' gets to live in a property which is usually close to their place of work at a fraction of the local rental cost.

Contact: Aidan Devlin, Director.
Tel: 0818 270244;
email
Aidan.Devlin@Camelotproperty.com;
www.camelotproperty.com

Take the Power of One Challenge — Turn it Off!

Noel Dempsey TD, Minister for Communications, Marine and Natural Resources, recently launched the Power of One campaign, a two-year national campaign to address the issue of energy efficiency in Ireland. The nationwide campaign is designed to highlight what each person can do as an individual to reduce wasteful energy consumption

With increasing energy demand as a result of the strongly growing economy, and with the



new era of high global energy prices, further sustained action on energy efficiency is a key Government priority. Ireland's total annual energy requirement grew in absolute terms by 59% between 1990 and 2004 (3.4% per annum on average) and increased in 2004 by another 1.4%. In line with the EU and international focus on energy efficiency, Ireland can take steps to manage and reduce energy demand but it requires collective action on the part of consumers and the economic sectors.



The main objectives of the Power of One campaign are:

- To build awareness on types and sources of energy, costs and environmental impacts;
- To inform consumers about the impact that inefficient energy use has on costs and the environment;
- To encourage individual responsibility and change in behaviour in small ways, every day;
- To empower individuals to recognise their role in the challenge, and to use their power to collectively make the difference.

The national campaign, overseen by the Department of Communications, Marine and Natural Resources working with Sustainable Energy Ireland, the ESB, Bord Gáis, EirGrid, Airtricity and the Department of Transport, will target multiple audiences including households, SMEs and the public sector, as well as the transport sector.

A major media initiative, the Power of One Street, was also announced. This initiative invites

householders throughout the country to "live" on the most energy efficient street in Ireland. Selected households will undergo an energy survey into their consumer preferences and behaviours in relation to heating, lighting, appliances and personal transport and the initiative will set special challenges throughout the year with the goal to make homes and individuals more energy efficient and aware. Interested individuals can enter online at www.powerofonestreet.ie.

Minister Dempsey also announced plans for all-island cooperation on energy efficiency in the coming months. "We are working enthusiastically with our Northern Ireland colleagues to make this an all-island campaign as part of our shared energy agenda".

Celebrity Daithí Ó'Sé, who is fronting the media campaign, said: "I am pleased to be part of this campaign because it shows us how we can be part of the solution. I needed a lesson or two when it comes to energy efficiency and have already begun to make some changes, like turning my TV off instead of leaving it on standby, and unplugging my phone charger when I'm not using it. I will spread the word and encourage others at TG4, and in my personal life, to change at least one thing — I hope you will, too."

Contact: www.powerofone.ie;
www.powerofonestreet.ie.

potterton myson golf trolley give-away!

Potterton Myson is renowned as a pioneering market leader, constantly introducing innovative new products to satisfy the increasing demands of an ever-changing industry. Just recently it unveiled a whole new portfolio of technologically-advanced products, all of which meet the stringent requirements of today's marketplace, especially in respect of performance outputs and energy efficiency.

In celebration of the introduction of these new models Potterton has devised a major promotional campaign aimed directly at installers. It is simple to participate in — contractors who install 10 boilers from the HE range between now and March 2007 will receive an electric golf trolley worth €450.

This offer is limited to independent installers and tradesmen and applies to any high efficiency boiler from the Potterton Myson range. Among the qualifying models are:—

Promax System HE Plus: This compact, fully-modulating domestic boiler is designed to be quick and easy to install. It has an energy output of 24kW and can generate up to 19% more heat from the same amount of fuel that a standard boiler would use. It also has built-in frost protection;

Promax Combi HE Plus: With energy outputs of 28kW or 33kW, this fully-modulating

boiler is extremely efficient and simple to install. Flues can be fitted anywhere and a wireless thermostat, sited remotely, allows for easy room temperature monitoring;

Promax FSB 30 HE: This floor-standing unit was specifically designed for fully-pumped systems and to fit under a standard worktop. It is highly-efficient and delivers significantly quicker heat-up times while, at the same time, considerable fuel savings;

Promax HE Plus: Deceptively small but very powerful, this fully-modulating unit utilises an intelligent control system to provide flexible heating solutions to meet demand up to 30kW. It is designed to provide central heating and hot water in conjunction with a hot water storage cylinder;

Suprema HE: The new Suprema HE is the latest manifestation of the renowned Suprema L. It retains the same internal layout but with significant improvements, such as the addition of a cast aluminium secondary heat exchanger. It is available in six outputs, from 30,000 Btu/h to 80,000 Btu/h with all boilers featuring the same architecture;

Performa: The new Performa HE range consists of three combis and four system boilers, offering a wide choice of outputs to suit almost every installation requirement. All feature the same basic architecture and technology platform as before, but with the addition of high-efficiency modifications which are designed for maximum installation simplicity;

Potterton Gold Combi HE:

Following a St£2 million investment in a new purpose-built product design centre, plus considerable research and development, Potterton has unveiled the technologically-advanced Potterton Gold Combi HE.

With its innovative design and stainless steel heat exchanger technology, this range incorporates three SEDBUK A rated boilers — the 24HE, 28HE and 33HE.

Intelligent control systems automatically adjust heat output to match demand while the compact size makes for easy siting and installation. Such is the confidence of Potterton Myson in this new range that all models come with a 3-year parts and labour warranty.

Contact: Potterton Myson (Ireland).
Tel: 01 - 459 0870;
email: post@potterton-myson.ie



better business

our pensions legislation is the envy of europe!



Brian Culleton, Foresthill Financial Planning.

In a booming economy we are all looking for opportunities to build long-term wealth as efficiently as possible for the benefit of our families. We want to prepare for the rainy-day and to build a nest-egg away from our business, profession or employment. Few, if any, jurisdictions offer the same attractive opportunities for investment and tax-efficient wealth accumulation as that which is available in Ireland. We have probably the best pensions landscape in Europe for individual self-employed and business owners. However, many people still do not know how good we can have it so here are 10 important points to consider.

We can accumulate substantial wealth in our pension assets!

Last year the government introduced a cap on the total pension fund a person could accumulate in their lifetime. That cap is €5 million and can be index-linked. This is a very generous limit. A similar cap applies in the UK but it is £1.5 million stg (or less than €2.4 million). Our limit is also an individual limit, so both husband and wife are entitled to accumulate their own pension to that limit.

We can own our pension assets!

Self-employed individuals, certain business shareholders, business owners and holders of AVC arrangements can now own their pension assets. This is facilitated by the option to move pension funds into an Approved Retirement Fund ARF at retirement.

We have investment choice

All the asset classes are available, including direct property, shares and investment funds. The most significant development in recent years has been the growth in the Self Administered Trusts and Self Directed Trusts.

We have investment flexibility

The tables (right) show the

maximum allowed but there is no obligation to fund at those levels. Subject to certain rules, there is flexibility to reduce, increase or suspend contributions.

We have great control

With regard to direct shares and direct property, the individual can choose the specific asset they want their pension to acquire, subject to certain pension rules. For example, once the pension criteria is satisfied, a scheme can invest in any type of property based anywhere in the world. This can include residential, office and industrial buildings.

We can borrow to invest

Individuals can purchase direct property, partake in a geared investment, or invest in funds that incorporate borrowings within the fund. Subject to revenue guidelines and lending criteria, we are allowed to borrow to purchase investment property in our pensions. This borrowing can be up to about 70% of the property value.

We have favourable tax treatment

We get a tax write-off on our contributions to approved pensions – either at corporation tax rates (ie. 12.5%) or at our marginal income tax rate (up to 42%). The pension investments

better business

our pensions legislation is the envy of europe!

grow free of any tax for the duration of the investment. At retirement a portion of the eventual fund can be received tax-free (typically 25% of the fund)

Access to your pension from age 50

For the owner-director (>5% shareholder) and employees, access to your pension assets has improved dramatically in recent years. Once you demonstrate to the revenue that it is a legitimate retirement, then you can access your pension funds from age 50 onwards (under early-retirement) with your employer's approval. This is a huge attraction.

We can access most of pension assets

At retirement you can withdraw 25% of your total fund tax-free. The balance you can transfer to the ARF fund (subject to a minimum of €65k being moved to a safety fund – An Approved Minimum Retirement Fund AMRF), which you will own and control.

Once the ARF is set up, any withdrawal is subject to income tax at your marginal rate. If no withdrawals are taken then an annual tax will apply to an "imputed" withdrawal of approximately 3% of the ARF. This is to encourage holders to draw

We have very generous funding allowances

For the self-employed individuals

Age	Maximum tax deductible limits as % of earnings
Under 30	15%
30 to 39	20%
40 to 49	25%
50 to 54	30%
55 to 60	35%
60 and over	40%

** An Earnings cap applies to pension contributions for tax relief purposes. The Earnings Cap (which changes each year) is €254,000 for 2006. Revenue limits and terms and conditions apply.

For the employed and business owners the maximum that can be contributed

Age Next	Funding as % of salary	Assumptions
30	42%	1) 10 years service at retirement
35	52%	
40	65%	2) 5% salary increase and 6% return
45	86%	
50	127%	3) Pensions index link at 3%
55	234%	
		4) Retiring at age 60

For certain self-administered arrangements the funding allowances can be even more generous.

annual income.

At any stage in retirement, you can choose to withdraw some or all of your funds from your ARF, subject to income tax. Again, the point is ...you choose!

Why is all this important now?

The preliminary tax deadline for the self-employed approaches at the end of

October. Also, many limited companies are fast approaching their financial year-ends when they must finalise their tax liability and pay the relevant tax Revenue. This is typically the time of year that individuals and corporates have the opportunity to avail of the tax-efficient investment opportunities that are open to them and reduce their tax liability at the same time

Plan Expo 2006

As Ireland's foremost construction industry trade event Plan Expo is to the forefront in showcasing innovative products, services and concepts which are invariably at the cutting-edge of construction and building services. This year is no exception with a vast array of exciting developments set to be unveiled throughout the three-day event which will take place at the RDS, Simmonscourt, from Thursday 9 November to Saturday 11 November 2006.

A particular feature of this year's show is the significant number of building services-related products and services on being featured. Indeed, many of these are profiled on the shortlist for Plan Expo's Product of the Show Awards. *bs news* has selected a representative sample from that shortlist and presented brief details in this preview of the show.

Wood Pellet Boiler

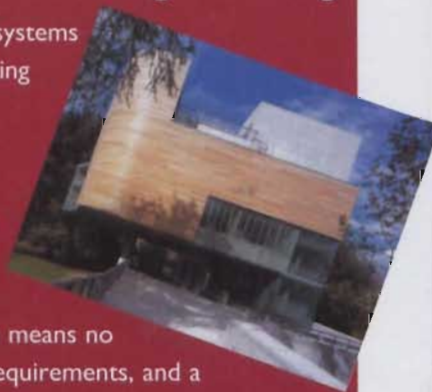


Gerkross have been pioneers in the design and manufacture of domestic boilers for over 30 years and its latest introduction — the Woodpecker range — is claimed to be the only Irish-manufactured woodpellet boiler currently available. Standard features of the Gerkross Woodpecker are:—
— EN 303-5 accredited;

- Automatic ignition;
- Modulating burner output;
- Automatic feed from hopper;
- Choice of silo sizes;
- Easy-clean ash-pan;
- Models range from 20kW to 50kW;
- Available in system or combi (DHW).

Geothermal Combined Heating & Cooling

Dunstar's geothermal CHC systems are designed to provide heating and cooling of buildings simultaneously, the major benefit being that a single installation can provide both heating and cooling loads instead of installing separate boilers and chillers. This also means no flues, vents or fuel storage requirements, and a reduced plantroom footprint.



If the heating and cooling loads are equal, heat is pumped from one area of the building to another — heat is removed from areas requiring cooling using ceiling-mounted cooling terminals and then pumped to areas requiring heating via wet plumbing circuits such as underfloor heating. If additional energy input for heating or heat rejection is required, the system uses a geothermal array as a heat resource or sink.

Skirting Board Heating System



Thermodul is a simple and functional skirting board heating system that works with any heating technology and operates mainly by radiant heat (80/85%) to provide very efficient heat distribution. It reaches comfort point quickly

due to the small amount of water circulating the system and saves energy by operating at a lower temperature than traditional radiators. It measures 13.7cm high and 2.9cm deep and is suitable for all types of applications.

It is available in three models — water; electricity; and dual-mode — and is easy to install in either new-build or retrofit. The system also has EN442 and ISO 9001 - 2000 certification.

Plan Expo 2006

RDS, Simmonscourt, Dublin 4
Thursday 9 — Saturday 11 November

Plan Expo 2006

Modular Sectional Radiator

Domino is a modular, sectional radiator concept which is based on a simple, yet original, idea — the base element comprises a 20cm by 20cm die-cast aluminium tile (5.5cm thick) which is available in three finishes: polished, satin and painted. It can be installed in any room and adapted to suit design requirements.



When horizontally positioned (cantilevered), it can act as a heated shelf and when mounted on a wall it can be used to create endless frame or geometric combinations.

Off-Site Bathroom POD

The McAvoy POD is an off-site-manufactured bathroom typically used in hotel and apartment construction. It comes complete, fully tiled and plumbed, and with all necessary bathroom accessories. Plumbing and electrical

connections are made through a service duct.



The POD is constructed using a durable steel frame lined with moisture-resistant plasterboard. It is fully tanked (water-proof membrane) before tiling and all plumbing and electric systems are fully air and water pressure tested before despatch.

Pellet Central Heating Boiler

The BioWin pellet central heating boiler is claimed to be as environment-friendly as a wood boiler and as convenient as an oil-fired boiler while, at the same time, offering the advantages of a future-oriented central heating system.

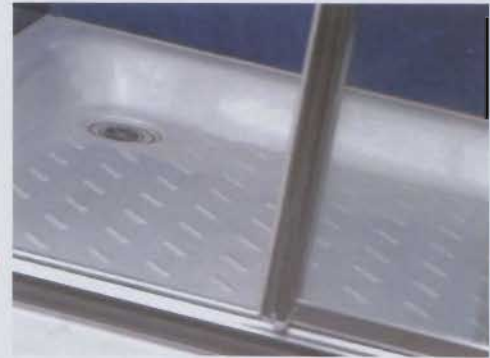
Incorporating innovative technology, it offers a continuously high degree of efficiency, low fuel consumption, minimum emissions and a high level of comfort and convenience.

Flexible Shower Tray Upstand

Classi Seal is a simple solution to the age-old problem of bathroom leaks caused by shrinkage and settlement in new homes. It is a combination of rubber and butyl bonding agent and is guaranteed to accommodate at least 15mm of vertical movement and still maintain a waterproof seal around a shower tray or bath.

Fitting is simple and takes just two minutes. There are no weak spots as it wraps around

corners. It is independently tested to ISO 8510-1 1990 and guaranteed for 10 years.



Enclosed Wood Burners

Bodart & Gonay are as renowned for the design aesthetics of their wood-burning range as they are for the quality, performance, energy efficiency and safety of the units. The technical innovations incorporated right across the range are ground-breaking and allow for unique stylistic design solutions. The governing philosophy of the company is to

produce appliances which combine the beauty of flame with maximum heat recovery and performance outputs



Plan Expo 2006

RDS, Simmonscourt, Dublin 4

Thursday 9 — Saturday 11 November

Plumb Lines

heard it on the grapevine ...



INSTALLER REVIEW PANEL ELECTIONS



The nomination deadline for installer representatives wishing to go forward for election to the Bord Gáis Networks' (BGN) Installer Review Panel is Friday, 3 November next. Valid nominees will be contacted and, if they confirm their willingness to stand, their names will be included on the ballot paper.

Ballot forms will be issued to all eligible voting installers on Friday, 17 November and they must be returned no later than 5pm on Friday, 1 December 2006. The

HEY EU — HANDS OFF!

News that the EU is to target boiler and air conditioning manufacturers because of their supposed failure to produce energy-efficient products is something of a joke. If officials knew anything about the building services sector they would know that energy-efficiency is the prime

consideration in the design and manufacture of all such appliances. They would also know that the marketplace demands such appliances and, for manufacturers not to produce them would be commercial suicide. Pompous rhetoric and veiled threats are all very well but what about doing something concrete and basic. Witness for instance the Irish Government's Power of One initiative (page 22). This simple approach will deliver enormous savings. Turning off appliances on standby is a huge energy saver ... why does the EU not demand that the manufacturers of PCs, DVD players, TVs, etc produce appliances which do not have a standby facility?

Pressure on *bona fide* installers is currently at an all-time high with their ability to trade profitably being hampered by all manner of difficulties. The Installer Review Panel is one of the few avenues left open to them to air their grievances and influence policy decision-making at a high level.

So, if you do have a vote be sure to cast it, and do so wisely. Your business future could depend on it.

Kevin Farrelly and Pat O'Shaughnessy (pictured above left), two installer representatives who currently serve on the Installer Review Panel. I understand both are going forward for re-election for 2007.

consideration in the design and manufacture of all such appliances. They would also know that the marketplace demands such appliances and, for manufacturers not to produce them would be commercial suicide. Pompous rhetoric and veiled threats are all very well but what about doing something concrete and basic. Witness for instance the Irish Government's Power of One initiative (page 22). This simple approach will deliver enormous savings. Turning off appliances on standby is a huge energy saver ... why does the EU not demand that the manufacturers of PCs, DVD players, TVs, etc produce appliances which do not have a standby facility?

ONE MAN'S LOSS

Eamon McGlade has left Bord Gáis and taken up a position at the FÁS Energy Centre in Ballyfermot, Dublin. Eamon has a wealth of experience in the gas sector and is now responsible for this FÁS centre's gas safety training programmes.

While a great loss to Bord Gáis and the installers he dealt with in his previous role, at least his experience has not been entirely lost to the business at large. No doubt we will see the benefits of his extensive knowledge come into play in future tailored gas safety training programmes coming out of the FÁS Ballyfermot camp.

Throughout his 34 years with Bord Gáis, Eamon was renowned for his interest in, and contribution to, the gas industry as a whole. He served with distinction on all manner of committees and associations, giving freely of his own personal time to further the aims of gas safety. I know I speak for everyone in thanking Eamon for his massive contribution to gas safety to date and, even more so, in pleading with him to continue with his efforts in his new role.

20 YEARS AGO TODAY

The triumphant Irish BTU golfers who scored a conclusive victory in the BTU Inter Region Competition at the Belfry in England. Their winning margin was a staggering 18 points over their nearest rivals. Pity the feat could not be repeated this summer!



MITSUBISHI HEAVY INDUSTRIES
AIR CONDITIONING

High performance high specification VRF inverter systems

evolution **KX4**: ultimate control



High energy efficiency
air conditioning systems
from 14.0kW – 136.0kW



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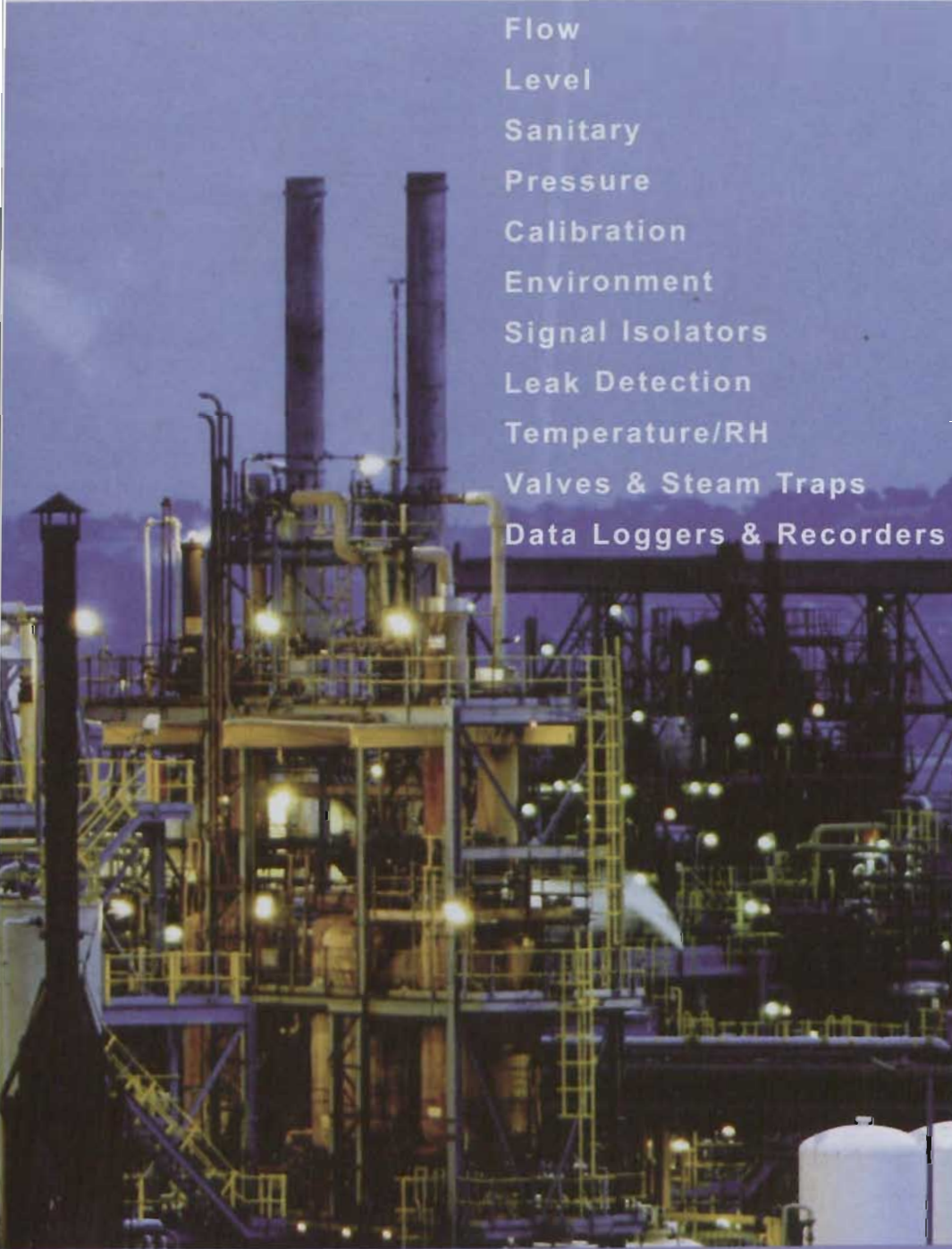
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